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ASSESSMENT OF FAMILY FARMS IN KARCAG WITH PRIME ATTENTION TO THEIR CURRENT SITUATION AND THEIR PROSPECTS

OCENA GOSPODARSTW RODZINNYCH W KARCAG Z UZWZGLĘDNIENIEM AKTUALNEJ SYTUACJI I ICH PERSPEKTYW

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Abstract. Family farming is not only a business, but also a lifestyle where insistence on independency, decision-making and rural area is strong. Therefore, focusing on this issue has prior importance in context of rural development and agriculture. During the research the main question was how farmers from Karcag considered family farming situation. What do they think the greatest advantages and disadvantages of a family farm are? What does their effectiveness depend on? How much is it worth working in family farming? How attractive is this form of business to the young? Under what conditions may family farming provide secure future prospects? On this basis family farming had become an approved form of business. Type of activity and scale of production have significant impacts on the efficiency in farming. The current grant system may not be sufficient to the stabilization and development of family farms; therefore, family farming under the current agricultural policy is not too enticing to the young.

Introduction

The analysis of rural settlements has become essential because they are rich in indispensable and irreplaceable values. Karcag, in the heart of Alföld (the Great Plain), has been an agricultural city since the Cumans settled here because "A cuman was born with agriculture". Rural depopulation poses significant problem due to lack of job opportunities, low standard of living and migration. Consequently, family farming is one of the tools for aligning rural areas [areas [Fehér 2005]. This is also proven by the fact that Food and Agriculture Organization of the United Nations (FAO) has declared 2014 for the International Year of Family Farming. Therefore, the topic of family farming has taken relevance. Due to the European Union (EU) accession farmers got a lot of opportunities to develop their famrs. According to a research 70% of the farmers in Jász-Nagykun-Szolnok county think that their situation improved because of the asseccion [Fehér et al. 2010]. This can be justify by the fact that not all of them can use the option.

As a result, the aim of the thesis is to reveal present situation and future prospects for family farms from the farmers' point of view. I raised the following questions and hypotheses: How do farmers consider the present situation of family farming? According to H1 family farming became an approved form of business. What are the greatest advantages and disadvantages of family farms in different forms? By the H2 hypothesis, one of the benefits includes the independency of farmers while he can spend more time with his family and he is surrounded by reliable labour, while according to H3 hypotesis the biggest problem is vulnerability due to low sale pricesComparing the advantages and disadvantages how much is it worth working in family farming? The type of the activity and the scale of business have profound effect on efficiency as mentioned in H4-H5 hypothesis. Under what conditions may family farming provide secure prospects? The H7 hypothesis assumed that the current grant system is not necessarily enough for the stabilisation and the development of family farms (H7). After all how attractive is this form of business to the

young? According to H6 it can be so attractive form because of independency and grants, which are provided by the government.

Research material and methodology

Analysis of statistical databases was chosen, in particular, as research methods. On the basis of bibliography, a questionnaire was conducted. This questionnaire was completed by local farmers, primary producers, family farmers, agricultural enterprises, the Research Centre of Karcag and the Deputy Principal of Szentannai Sámuel Agricultural Vocational School, Grammar School and College. The data recording lasted for two months (from December to January) considering the agricultural works after pretesting with some farmers.

The questionnaire was divided into 3 main groups: questions on the head of farming, his own farm and finally questions on the family farming. Pertaining to questions on the head of farming, I had interest in the farmer's gender, age, level of qualification and the form of his business. In context of his farm, the following topics were examined which sector it belonged to, the size of agricultural plots providing the farmer dealt with crop production or mixed farming, it was extensive or intensive production, the ratio of rented land, whether the farmer leased his own land or not, the plants he grew and livestock he bred. The research examined whether he produced for own use or for sale and the prices of production and sale. It was followed by the study of workers pertaining to the number of workers, the use of family labour, casual work and hired labour. Another intention was to ascertain how their opportunities had improved since joining the EU and how they took advantage of opportunities provided by the EU and Hungary. Therefore, it was important to assess what extent they required support or loan. There were some questions about the motivations of farmers, the benefits, negative aspects and vulnerability of family farming and how much it was worth running a family farming as an agricultural business as well. During conducting the questionnaire simple questions (yes/no questions in some cases) were used. Due to direct data collection, the questions were completed with farmers' opinions and comments. Finally, 81 questionnaires were completed.

The questionnaires were computed by the use of nonparametric test, cross-tabulation and Spearman correlation. Among the methods applied in the research, normality test of ranges was needed in some cases. It was examined by Kolmogorov-Smirnov test where the null hypothesis has to be accepted at higher than $p 0.05$ of significance. Consequently, the sample is normally distributed concerning specific factors. If significance is under $p 0.05$, the sample is non-normally distributed considering a specific factor therefore, null hypothesis is rejected [Malhotra 2008].

During correlation analysis, Pearson's chi-squared test was applied, which evaluates the connection between categorical variables. It tests a null hypothesis stating that measured and estimated data are equal, so there is no coherence between the variables. It can be applied if data frequency in each cell in the table based on the two characteristics is at least two and data within five are allowed in up to 20 % of the cells [Sajtos, Mitev 2007].

Median probe was applied to demonstrate the differences between groups where medians of all the data from the lowest to the highest were used. Data in groups are divided nearly in the same way under and above the common median providing there is no difference between the groups at all. Test on rates is completed by methods introduced in Pearson's chi-squared test.

Median values of test coefficients are compared by Mann-Whitney test in two independently formed groups. Firstly, data are ranked from the lowest to the highest. Secondly, data are replaced by their rank numbers (their average rank numbers in case two or more data are equal). Finally, rank numbers are divided into the original groups. There is no difference between the medians of the groups if low and high rank numbers can be observed in both groups and the average rank numbers are approximately the same. In another case, the average rank number may be higher in either of the groups. Amounts of ranks are then calculated for both samples. If significant difference is demonstrated, there is significant difference between the groups, as well [Fidy, Makara 2005].

In case, we would like to examine more than one group, Mann-Whitney test should be extended to the so-called Kruskal-Wallis test. This test is convenient to examine the advantages and dis-

advantages of family farms in context of different business forms. By the test, it can be examined whether samples originate from the same distribution. The null hypothesis is that the medians of all groups are equal which is accepted above $p 0.05$ significance and rejected under that value. In case null hypothesis is rejected, significance difference can be observed in the opinion on specific test coefficient for the grouping criteria [Leard Statistics 2016].

In order to answer the questions in-depth interviews were made with 2 researchers of the Research Centre of Karcag, who examined the situations of family farms in the Northern- Great-Plain Region, in Jász-Nagykun-Szolnok county, Deputy Principal of Szentannai Sámuel Agricultural Vocational and High School, co-chairman of Fiatal Gazdák Magyarországi Szövetsége (Hungarian Association of Young Farmers) and 2 family farmers. While interviewing, I asked open questions on the present situation of family farms, their moralities, difficulties, their motivations and future prospects.

Research results

The situation of family farming

On the basis of the first hypothesis, family farming has become an approved form of business. It was fully demonstrated because family farming has reason for existing in Karcag. There are an increased number of farms in the city, which is not surprising in an agricultural settlement and where most of the industries are based on agriculture. Agricultural attitude is also due to secure employment and satisfying livelihood.

Advantages and disadvantages of family farming

Several benefits of family farming are well known. According to H2 hypothesis, one of the benefits includes the independency of farmers while he can spend more time with his family and he is surrounded by reliable labour. In order to test the hypothesis, Kruskal-Wallis test was applied in which the hypothesis was partly justified. According to the farmers' answers, the greatest morality of this form of business includes more time to spend in their families. Members of the family share the work because it is their own interest to complete the work in time and under sufficient expertise. Consequently, family members are considered reliable and motivated labour. From the opinion of other forms of businesses, one of the greatest morality involves independency, so the time is his own. It was ranked as a less important point in the family farmers' answers and according to the answers in the in-depth interviews predictability and secure livelihood are also important because they are able to support their families and know exactly what types of food will be put on the table. In addition, they can preserve family traditions (pig killing, palinka distillation, sheep cooking) which means „stuck to the ground” at the same time strengthening the retention of rural population.

Attraction of family farming for the young

Generation tensions were mentioned as a significant problem in the in-depth interviews, which may be due to different mind-sets or the issue of farm transfer. Present tendency shows that young generations are less and less interested in agriculture. It is absolutely a skill shortage however, the current system tries to encourage them. At the same time H6 hypothesis (that independency in family farming may become an enticing opportunity to the young under the current agriculture) had to be rejected. More generally, most of the farms face lack of resources and qualification.

How family farming worth it?

Comparing advantages and disadvantages, the research examined how a family farm could be effective and what it depended on. In the next hypothesis, It was supposed that effectiveness was crucially based on the type of activity. The H5 hypothesis is strongly connected to efficiency proving that scale of production affects it significantly. It was concluded (via a non-parametric

correlation that lower producer price is in moderate connection with vulnerability, but there is no connection with cultivated land. It is not necessarily true that small-scale farms are rather exposed to vulnerability than larger ones. Therefore the H5 hypothesis was rejected while H4 hypothesis was demonstrated because those farmers are more likely to be exposed to vulnerability of low producer prices who deal with animal husbandry.

Grants and preferential loans provided by Hungary and the EU contribute to the effectiveness of farms although according to H7 hypothesis the current grant system is not necessarily enough to stabilize and improve family farms.

The future of family farms

The current agricultural policy prefers family farming, so in the last hypothesis that the policy would provide secure future for family farms was supposed. It was partly accepted.

Despite the efforts of the state, developments do not go according to the plans. In practice, smaller farms lease out or sell their land while bigger farms acquired them. There is passivity in taking advantages of opportunities in context of smaller-scale farms. It is mainly due to lack of information or the farmers' mentality. They are distrusted the government because of difficulties suffered by the former regime.

Overall, inspiration by the government is not enough at all to secure the future for family farming. As I have mentioned earlier, lack of further generations, secure future cannot be on the agenda. It is a nationwide problem in Hungary. Consequently, family farms will not gain the level within 10-15 years that the current agricultural policy intends to provide. The government could largely improve their situations by cooperation, integration, the manufacture of their own products and local sales. Thus, there are arguments for cooperation in order to let their voices heard, but due to the farmers' attitude and mentality, its implementation may be largely doubtful.

Summary and conclusions

As a consequence, family farming has become an approved form of business. The current Rural Development Policy involves them as basic target groups; they are largely supported and coming to the foreground. Their situations depend on the type of activity, intensity and legal regulatory context. It grants livelihood to farmers.

On the basis of the farmers' answers, I would emphasize time spent in family, division of labour and reliable workforce, as the greatest advantages. Work together in the family is a benefit because it contributes to job and landscape maintenance.

Vulnerability due to fluctuations in purchasing prices is considered the greatest disadvantage, which influences mainly farms in animal husbandry.

Compared the advantages and disadvantages, I intended to reveal to what extent a family farming might be successful and what it depended on. After the analysis the conclusion is that efficiency in farms is largely influenced by the type of activity and the scale of production. The larger the farm is, the more it is worth working in agriculture as a major occupation. Working in smaller farms can be characterised by part time jobs and pension supplement. The optimum size of farms is 50-100 hectares in context of crop production while it is only 3-10 hectares in farms dealing with fruit and vegetable production, but it is also influenced by the efficiency in productivity, the number of family members and the structure of the farm. The type of business to be chosen always depends on local conditions. Traditional crop production is prominent in Karcag while animal husbandry is also present. In recent years, the prices and the aid system has been more favourable to arable producers. Livestock sectors are in very tough situation with very few exceptions, but crop production could not work without animal husbandry and vice versa, so the best type of farming would be a mixed type of business in 60-40%.

In context of the future for family farms, their situations are saddening as the trend shows that fewer and fewer young people show interest in agricultural activities. Despite actions to revitalize,

programmes were not successful. Moderate youthfulness can be observed only among mid-farmers. It is not the lack of agricultural professional, but there is large disinterest in agriculture.

Despite, there would be high demand for them since agriculture remains the lifeblood of rural areas. So far, this type of agricultural mid-class operating for several generations has been needed. In recent years, most of the family farms have begun to strengthen. Hopefully, more and more successful generation changes will take place. They could become more successful by cooperation and integration. The thought of farmers' agreement may be the solution, but it is totally unpopular among new family farmers due to the Cuman mentality: they rather fag on their own farms than share. There is a saying: "Stubborn Cumans!"

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Streszczenie

Rodzinne rolnictwo to nie tylko biznes, ale także styl życia, w którym kładzie się nacisk na niezależność podejmowania decyzji i powiązanie z obszarami wiejskimi. Dlatego kwestia ta jest tak ważna z punktu widzenia rozwoju obszarów wiejskich. Przedmiotem badań było zaprezentowanie, jak rolnicy ze wsi Karcag na Węgrzech postrzegają sytuację rolnictwa rodzinnego. W szczególności zbadano wady i zalety rodzinnego gospodarstwa rolnego, jego skuteczność, wartość pracy oraz na ile ta forma jest atrakcyjna dla młodych rolników. Stwierdzono, że obecne uwarunkowania społeczno-ekonomiczne mogą być niewystarczające do stabilizacji i rozwoju gospodarstw rodzinnych. Stąd ważne są zmiany w zakresie polityki rolnej w zakresie zachęcania ludzi młodych do prowadzenia rodzinnych gospodarstw rolnych.

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